In the general index the only persons mentioned are those whose names occur on the first 20 pages. About 75 others, many of whom are shown in the text to have made important contributions to the knowledge of the Maryland flora, are omitted. This perhaps should not be charged up to the authors, however. The botanical index seems to be complete, except for the plants mentioned on pages 86, 87, and 385 (and these are the ones excluded from the state flora), and in the footnotes on page 164 and in the catalogue.\*

With the few exceptions here noted, the Plant Life of Maryland is a model of its kind, and it easily ranks among the foremost of existing local phytogeographical works. It is to be hoped that botanists in other states, especially those whose vegetation has not yet been systematically described, will soon follow the splendid example set by Dr. Shreve and his associates.

ROLAND M. HARPER.

## Apgar's Ornamental Shrubs of the United States

In criticising a book we must look at it from the standpoint of the author. The late Mr. Apgar has fully informed us in the preface that his aim has been to produce a work that will reach "that large public who wish to know by name the attractive shrubs cultivated in parks and private grounds, but who are actually afraid of anything called botany." Viewed from this frank avowal of its purpose, the little book before us will fill the need of a large number of people who have not an extended knowledge of botany and its terms. What terms the author has found it necessary to use have been fully explained in the first part of the work and in the glossary at the end. The primary classification is based upon the form and position of the leaves, when these are present; or in their absence keys are provided for deciduous-leaved shrubs, and for thorny or spiny

<sup>\*</sup>Although the present work is not a good illustration of the point, it might not be out of place to remark here that indexing is too often regarded as a mere mechanical process, requiring no intelligence or discretion, and delegated by the author to persons who have no interest in his work.

<sup>†</sup> Apgar, A. C. Ornamental Shrubs of the United States (Hardy, Cultivated). Pp. 1–352. pl. 1–4. f. 1–621. American Book Co. Price \$1.50.

plants. Flowers and fruits are assigned a secondary place. Part II is devoted to the "General Opening Key" and the "Keys to the Genera," with instructions as to their use. In Part III are the descriptions of the shrubs, and here a valuable help is offered in the numerous illustrations, made by the author himself, in which he has indicated what are considered the essential characters.

The little work must not be viewed from the scientific standpoint, for the author makes no claim along this line. Considered from the point of view of the author, and of that large class who desire merely to know the names of shrubs, this little volume will be of great use.

George V. Nash.

A recent investigation of the sargasso sea was undertaken by Dr. John J. Stevenson. He says (Science, December 9, 1910) that the "indefinite descriptions of the area and mass of seaweed, as well as the extraordinary statements made by some authors in discussing the origin of coal, induced the writer to make an examination of the conditions for himself. The matter is easy, because the steamship route between Barbadoes and the Azores crosses the area diagonally and passes very near the center." His own observations, and the information gained from officers who had crossed the sargasso sea many times, lead him to think that "much depends on the time of year, for weed appears to accumulate while the trades are mild and to be broken up later in the season when the strength of the winds increases. In any case, however, the weed occupies only a small part of the area, the patches being separated by wide spaces of clear water, almost free from weed. Many of the bunches show unmistakably that they had been attached to rock; and the plants have traveled far, since in a large proportion of bunches only a part is living, the dead parts being of a brownish color." It is evidently unusual to find a patch exceeding a half acre in extent. In passing through the Bahamas the seaweed is found to be "much more abundant than along either of the lines followed across the sargasso. The weed is evidently the same, being in circular bunches up to 18 inches diameter arranged in strips according with the direction of the wind, though occasionally in bands or even in patches 8 by 10 feet. The patches are near the large islands."

Mr. Stevenson feels that "At best, the quantity of weed seen at any locality is wholly insignificant. Midway in the sargasso sea, the bunches seen in a width of a mile would form, if brought into contact, a strip not more than 65 feet wide. This, where the weed is most abundant. But the bunches are very loose, the plant material, as was estimated, occupying less than one fifth of the space, so that if the bunches were brought together so that the plant parts would be in contact, each square mile would yield a strip not more than 13 feet wide and 3 or 4 inches thick, or barely 2,500 cubic yards to the square mile. . . . The accumulation of decayed vegetable material from seaweeds must be comparatively unimportant under the sargasso sea; and what there is would be merely foreign matter in mineral deposits."

I. B.

## PROCEEDINGS OF THE CLUB

NOVEMBER 30, 1910

This meeting was held at the New York Botanical Garden. Nineteen persons were present. Vice-president Barnhart occupied the chair.

The minutes of the meeting of November 8 were read and approved. Dr. W. D. Hoyt, of Rutgers College, New Brunswick, N. J., was proposed for membership.

The first paper of the announced scientific program was by Dr. N. L. Britton on the "Flora of Pinar del Rio, Cuba." Dr. Britton gave an account of his recent botanical explorations in this province of Cuba in company with Mrs. Britton, Professor F. S. Earle, and Professor C. Stuart Gager. After a sketch of the earlier botanical explorations of Cuba by Charles Wright and others, the general floral features of the province of Pinar del Rio were described and many specimens were exhibited. An account of this work is published in the *Journal of the New York Botanical Garden* for October.